



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,112	03/11/2004	Stephen Rawle	00216-624001 / Case 8125	5924
26161 7590 04/30/2008 FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022				
EXAMINER				
PAYER, HWEI SIU CHOU				
ART UNIT		PAPER NUMBER		
3724				
MAIL DATE		DELIVERY MODE		
04/30/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/798,112
Filing Date: March 11, 2004
Appellant(s): RAWLE, STEPHEN

Geoffrey P. Shipsides
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 2-6-2008 appealing from the Office action mailed 9-12-2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

This appeal involves claims 1-8 and 11-20.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

The following is a listing of the evidence (e.g., patents, publications, Official Notice, and admitted prior art) relied upon in the rejection of claims under appeal.

U.S. Patent No. 4,200,976	Gooding	5-1980
U.S. Patent No. 6,212,777	Gilder et al.	4-2001

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-8 and 11-20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Gilder et al. (U.S. Patent No. 6,212,777) in view of Gooding (U.S. Patent No. 4,200,976).

Gilder et al. shows a shaving blade unit comprising a housing (1); a plurality of parallel blades (11,12,13) supported by the housing (1), the blades (11,12,13) having an average interblade span (S2,S3) between 1.0 – 2.0 mm; the blades (11,12,13) being each mounted on respective support members (see Figs.1 and 2, not labeled) that are each movably mounted (see column 1, lines 45-49) on the housing (1), each of the support members having a blade platform portion (Figs.1-2 not labeled) for supporting the respective blade (11,12,13) and a depending base portion (Figs.1-2 not labeled)

Art Unit: 3700

angled relative to the blade platform portion, and the depending base portions being arranged generally perpendicular to an imaginary shaving surface (P) approximately intersecting the blade cutting edges, the blades (11,12,13) having a blade length extending rearward from the cutting edge, the blade exposure of blades between the first blade (11) and the last blade (13) being approximately zero degree (see Fig.1), or the first blade (11) having a negative exposure (i.e. EXP -0.04 , see Fig.2) and the last blade (13) having a positive exposure (i.e. EXP $+0.06$, see Fig.2), and the blades having a blade tangent angle between 19-28 degrees (see column 2, lines 45-46) substantially as claimed.

The mere differences between Gilder et al. and the claimed invention reside in the number of the blades and the blade length.

Specifically, Gilder et al. shows "three" rather than "five" blades, and it is silent about the length of the blades.

However, Gilder et al. does mention a blade unit having many blades can produce a closer shave than a similar blade unit with only one or two blades (see column 1, lines 19-21).

In view of teaching, it would have been obvious to one skilled in the art at the time this invention was made to modify Gilder et al. by providing the three-bladed razor blade unit with two additional blades for a closer shave as desired.

Regarding the blade length, Gooding teaches it is desirable to use blades of narrower width (in the range of 0.8 mm to 2.0 mm, see column 2, lines 9-14) in a

shaving unit to facilitate passing of shaving debris through the shaving unit and to accommodate a greater number of blades for a given width of the shaving unit.

Therefore, it would have been obvious to one skilled in the art to further modify Gilder et al. by having the blade length in the range of less than 1 mm depending upon the number of blades to be accommodated in a given width of the shaving unit.

Regarding claims 18-20, the claimed thickness range for the blade support members is not patentably distinct over Gilder et al. because it is well known in the razor art, and it is common knowledge that the thickness of the blade support members affects the rinsability of the blade unit. That is, for a given width of a blade unit, the thicker the blade support members the less the rinsing efficiency. This is due to the thicker blade support members inevitably occupying more rinsing space than the thinner ones. Thus, it would have been obvious to a person of ordinary skill in the art to try a desirable thickness range such as that of claimed for the blade support members of Gilder et al. based upon a given size of the blade unit and the number of blades accommodated therein and yet not to jeopardize the rinsing efficiency thereof.

(10) Response to Argument

The issues before the Board are whether it is obvious to make the three-bladed razor unit of Gilder et al. into a five-bladed razor blade unit, and whether it is obvious to provide the blades of Gilder et al. with a blade length of less than 1 mm.

Appellant argues, at page 5 of the brief, Gilder '777 discloses a particular geometry for a three blade design that allows for acceptable drag forces while providing

Art Unit: 3700

a closer shave, the artisan would not have considered adding blades to the blade unit of Gilder '777 to be obvious. In response, as is well known in the razor art, a razor blade unit having many blades can produce a closer shave. However, adding extra blades can have a serious detrimental influence on other blade unit characteristics, most notably the drag forces experienced when the blade unit is moved over the skin. It is true that Gilder '777 discloses specifically a three-bladed razor blade unit. However, knowing the advantage of having more blades for producing a closer shave, it would have been obvious to one skilled in the art to provide the three-bladed razor blade unit of Gilder '777 with any desirable number of additional blades, such as two additional blades, to achieve a closer shave as desired. Further, the number of blades in a razor unit is deemed to be an obvious matter of choice depending upon whether a closer shave (i.e. more blades) or a less drag force (i.e. less blades) is preferable. Moreover, as evidenced by Coffin et al. (U.S. Patent Application Publication No. 2004/0128835 cited in the 9/12/07 IDS) any practical number of blades such as one, two, three, four or five blades (see paragraph [0017]) can be used in a razor blade unit. Thus, to provide a practical number of blades, such as the claimed five, in the razor blade unit of Gilder '777 would have been obvious to one skilled in the art.

Appellant argues, at pages 6 and 7 of the brief, Gooding discloses an "open framework" and the main purpose of disclosing a narrow blade width for use in the Gooding device is to allow hair to pass through the open frame structure. An artisan having ordinary skill in the art would not have made asserted combination because the advantages discussed by Gooding would not apply to the very different razor cartridge

Art Unit: 3700

disclosed in Gilder '777. Examiner disagrees. By using narrower blades in Gilder '777, the space between adjacent cutting edges increases (i.e. the cutting edges protruding less from their respective support members as compared to wider blades) and thus a bigger rinsing space for better rinsability. Further, the use of a narrower width for razor blades has the inherent advantage of reducing the material needed for the blades and thus cost-effective. Therefore, it would have been obvious to one skilled in the art to use a narrower blade width for the blades of Gilder '777 for the advantage of better rinsability and for cost-effective purpose.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

Respectfully submitted,

/Hwei-Siu C. Payer/

Primary Examiner, Art Unit 3724

/Boyer D. Ashley/
Supervisory Patent Examiner, Art Unit 3724

/Allan N. Shoap/
Special Programs Examiner, TC 3700